KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)
Summary: Influenza activity is currently low and steady.
- ILI presentations at sentinel GPs and EDs are fluctuating at low levels.
- Influenza notifications and PathWest laboratory detections and percent positivity remained low this week; however this is subject to correction as there is currently a delay in laboratory reporting.
- Influenza B and influenza A (both H1N1 and H3N2) viruses continue to co-circulate at low levels.
- Overall non-influenza virus activity continued to fall this week, primarily due to a decline in RSV detections.

GASTROENTERITIS
- Gastroenteritis activity at sentinel GPs and EDs is currently around expected levels for this time of year.
- Rotavirus and norovirus activity remains low.

VARICELLA AND OTHER VACCINE-PREVENTABLE DISEASES
- Shingles and chickenpox activity at sentinel GPs and EDs continues to fluctuate around baseline level.
- Rubella: No cases have been confirmed in WA since two imported cases in early April 2017.
- Mumps: No cases notified this week. Eleven cases have been confirmed to date in 2018, associated with infection acquired overseas or interstate, and with limited local transmission at a Perth secondary school.
- Measles: No cases notified this week. There have been ten measles cases confirmed in Perth residents since mid-March, including four adults, five infants too young for vaccination, and one teenager. Eight of the ten cases were infected while travelling overseas. The imported cases have been infected in Bali, Thailand, India, Afghanistan and Malaysia. To date, two cases have been infected in WA. It is now at least one incubation period since the end of the infectious period in all cases, and it appears unlikely that there has been any additional local transmission. It is recommended that measles vaccine be considered for all people travelling overseas, including to Bali, who were born after 1965 and who do not have clear documentation of having previously received two doses of measles vaccine.

HEpatitis A ALERT
Three locally acquired cases of hepatitis A, the latest with illness onset in early May, have been linked to a national outbreak associated with consumption of Creative Gourmet brand Frozen Pomegranate Arils, sold through Coles stores. The implicated product has been subject to a voluntary recall, but given the long incubation period of hepatitis A, further cases could present over coming weeks.


Virus WAtch is a weekly electronic publication by the Communicable Disease Control Directorate (CDCD) and key collaborators. It provides a brief summary of General Practice and Hospital Emergency Department sentinel surveillance data on influenza-like illness, gastroenteritis and varicella-zoster disease, together with relevant laboratory information, to alert health care workers in WA to important circulating viruses. All figures and data were accurate at time of publication, but subject to change. The data collections used to create this publication include:
- Sentinel General Practice data collected by WA members of the Australian Sentinel Practices Research Network (ASPREN)
- Emergency Department data provided by the Emergency Department Information System (EDIS), which currently incorporates data from the following hospitals: Fiona Stanley Hospital, Sir Charles Gardiner Hospital, Royal Perth Hospital, Princess Margaret Hospital, King Edward Memorial Hospital, St John of God Midland, Bunbury Hospital, Armadale Hospital, Joondalup Health Campus, and Rockingham General Hospital.
- Notification data derived from disease notifications received by CDCD, WA Department of Health from medical providers and public or private laboratories in WA. These data are updated routinely to include admission status for all public and public/private hospitals in WA and hospitalisation data are included in the report during the influenza season.
- Viral laboratory data obtained from PathWest laboratories at QEII Medical Centre, as well as via notification data sent by all WA laboratories to CDCD, WA Department of Health.
Reported routine influenza detections were low this week possibly due to an ongoing laboratory reporting delay. Data for last week (ending May 20 2016) has been updated. Neither of the two samples submitted for influenza testing by sentinel GPs tested positive.

The rate of ILI presentations to WA ASPREN sentinel GPs remains in the lower range of values reported at this time of year.
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

**Viral Respiratory ED Presentations and Admissions**

Respiratory viral presentations and admissions to sentinel EDs remained stable this week.

**ED Respiratory Viral Presentations, 2014-2018**

The number of respiratory viral presentations to sentinel EDs remains in the mid-range of inter-seasonal levels.
The number of influenza notifications received by the Department of Health remains at inter-seasonal levels.

The graph is a summary of all influenza notifications received by the DoH, Western Australia to the end of the current reporting week, for which cases had date of symptom onset or specimen collection between 21/05/2018 and 27/05/2018. The seasonal threshold defines a value above which may indicate epidemic seasonal influenza activity. The threshold value is calculated based on analysis of seasonal influenza data from the past four years.

The percentage of specimens testing positive for influenza virus at PathWest is currently at inter-seasonal level; however this is subject to correction due to a laboratory reporting delay; of 130 specimens, 2 (2%) tested positive in the past week.

The graph is a summary of all WA routine and sentinel samples that have been processed by PathWest as of Wednesday 30th of May 2018. This number does not include samples referred by other private laboratories for influenza subtyping.
Two routine samples were subtyped by PathWest during this reporting week; both were typed as influenza B.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 30th May 2018. This number does not include sentinel samples or samples referred by other private laboratories for influenza subtyping.

Overall non-influenza activity continued to fall this week, primarily due to a decline in RSV detections.
The number of gastroenteritis presentations to sentinel GPs continues to fluctuate at relatively low levels.

The following is a summary of current Emergency Department Sentinel Surveillance (EDSS) data for gastroenteritis presentations. Baseline levels for gastroenteritis presentations and admissions were calculated using the mean of weekly EDIS data from week 1, 2013 to week 52, 2017.

**Gastroenteritis ED Presentations**

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<th>Week ending</th>
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<th>No. of presentations admitted</th>
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<td>20/05/18</td>
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</tr>
<tr>
<td>27/05/18</td>
<td>30</td>
<td>30</td>
</tr>
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</table>

Gastroenteritis presentations and admissions to sentinel EDs remained below baseline level this week.
The number of gastroenteritis presentations to sentinel EDs is fluctuating within the range of values seen at this time of year.

Rotavirus and norovirus activity remains low.
Chickenpox presentations at WA ASPREN sentinel GPs rose above baseline this week, whilst shingles presentations continued to fall.

Baseline levels for chickenpox and shingles presentations to WA ASPREN GPs per thousand consultations were calculated using the mean of weekly WA ASPREN data from week 1, 2013 to week 52, 2017.

The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for varicella-zoster virus presentations.

Shingles and chickenpox presentations at sentinel EDs both rose above baseline levels this week.

Baseline levels for varicella-zoster virus presentations were calculated using the mean of weekly EDIS data from week 1, 2013 to week 52, 2017.